

## SAE Handbook, Lesson 5

# How Do You Select the Right SAE?

### Unit. Supervised Agricultural Experience

### Problem Area. How do you select the right SAE?

#### Student Learning Objectives. As a result of this lesson, the student will...

1. List five factors to consider in selecting an SAE.
2. Be able to give SAE advice to another individual when presented with information about that individual



#### Time

Instruction time for this lesson: 50 minutes



#### Resources

<http://www.cals.ncsu.edu/agexed/sae/toolbox/index.html>



#### Tools, Equipment and Supplies

Writing Surface

Overhead Projector

SAE.5.TM.A

SAE.5.AS.A (one copy for each student)

SAE.5.Assess

SAE.5.PPT (A PowerPoint presentation containing the key materials in the lesson is also available).



## Interest Approach



### Activity

*Display SAE.5.TM.A.*



There have been a variety of television shows such as The Bachelor and The Bachelorette where the guy or gal tries to find the right match. We are going to play a variation of that, but are going to try to match the right person to the right vehicle. Look at the vehicles on the visual and read the descriptions of the three individuals. Which vehicle should each person select? You will have about four minutes to make your selection.

*After four minutes have the students share their matches. Ask questions about why each student made the choices that were made.*



What were some of the factors that had to be considered in determining which vehicle was best for each person?

## Summary of Content and Teaching Strategies

### OBJECTIVE 1: List five factors to consider in selecting an SAE.

*We want the students to seriously start thinking about the feasibility of the SAE program they have been thinking about for the past couple of days.*



Just as in selecting a vehicle, there are a number of factors that should be considered in selecting an SAE program. What are some of the factors that you think should be considered in selecting an SAE?

*Write "Factors to Be Considered in Selecting an SAE." on the writing surface. As students come up with ideas, write them on the writing surface and then discuss them. Here are some of the factors that should be suggested. If the students don't come up with these, you may need to give some hints or suggestions.*

**Cost** – How much money will be required to buy the supplies and equipment for the SAE? If a substantial amount of money is required to start the SAE, where will it come from?

**Potential for profit** – If the SAE is an entrepreneurship type of SAE, is there a reasonable chance to make a profit? Will people want to buy the product or service? The goal is to make money.

**Marketing** – Where will the product be sold? Is there a demand for the product or service? How will the product or service be advertised and marketed?

**Space or land required** – Some SAE programs require land, pens, greenhouse bench space, lab space, etc. Is space or land available? Will you have to pay rent for the space? Who will provide the space or land?

**Availability of equipment** – In order to conduct the SAE, is specialized equipment required? Some agriscience research projects may require microscopes, scales, Petri dishes, etc. Is that equipment readily available for your use? Some farming activities also require specialized equipment such as combines, tractors, planters, etc. Is this equipment available for your use? Is it possible to lease the equipment or pay someone to do some of the activities for you?

**Length of time to completion** – How long will it take to complete the SAE activity? It is best if the SAE can be completed in the semester or year in which the student is enrolled in the agriculture class. Some SAE projects may require a year or longer for completion. If you do an experiment on tree growth, it could take several years before results are available. If you were breeding a horse in order to get a colt, that would take a number of years from conception to the colt being big enough to train. If the student plans to be in agricultural classes for a number of years, then long term projects may be OK.

**Amount of time student has available** (how many other extra curricular activities is the student involved in?) – How much time does the student have available to dedicate to the SAE activity? Some SAE programs may require minimal time commitments, while others may require substantial amounts of time. The timing of when most activities occur in the SAE also must be examined. If a student plays a lot of baseball, then this could interfere with a lawn care SAE since both occur during the same time.

**Will you learn something new?** – The goal of the SAE is to learn – preferably to learn something new. If a student has grown up on a sheep farm, he or she may want to consider something other than a sheep production project in order to learn something new.

**Is the SAE of sufficient scope to be challenging but not overwhelming?** – Some SAE activities could be very simple to do and some can be very, very challenging. The secret is to select an SAE activity that is in the middle. It will require some effort but will not be overwhelming.

**Legal Issues** – There are certain legal issues that must be considered in selecting an SAE. Child labor laws prevent 14- and 15-year-old students from doing certain types of work. In selecting an SAE, you want to make sure it is legal to do what you have in mind.

**Availability of transportation** – If a student considers a placement type of SAE, how would she or he get to the place of employment? Transportation must be available.

**Related to Career Choice** – Perhaps one of the most important factors to consider in selecting an SAE is, “Is this SAE related to my potential career?” Ideally, the SAE will have some relationship to the career choice of the student.

**Personal Interest** – One of the most important factors in selecting an SAE is personal interest. One should select a project that appeals to him or her and will be enjoyable.

## OBJECTIVE 2: Be able to give SAE advice to another individual when presented with information about that individual.



### Activity

*We are going to do a role playing activity. Pass out SAE.5.AS.A to the students. This sheet contains information about five different students. Select five students to each play the role of a student. Assign each student to be Student A, B, C, D or E from the activity sheet. Each student is going to meet with the agriculture teacher and seek advice about some possible SAE activities. Select five other students to each play the role of the "agriculture teacher". Based upon the information presented by the student, the agriculture teacher should make some suggestions about what the student should have as an SAE. It is OK if members of the audience also contribute ideas.*



Have any of you ever thought about being an agriculture teacher? Five of you will get the opportunity to do so today. I am going to select five of you to play like you are the agriculture teacher, and I am going to select five of you to be students who are trying to decide on an SAE. Each student should come see the agriculture teacher, read the information from the activity sheet, and then see what advice the teacher has.

*Have the students perform the role play. Ask questions of the participants and guide the students to consider the various factors that have to be considered in selecting an SAE.*



### Review/Summary



Think about the SAE program you might have. Share with the class one factor that we discussed today that may have a major influence on the type of SAE you have.

*Go around the room and have each student identify one factor that could impact their decision regarding what type of SAE to conduct.*

*At this time pass out SAE.5.Assess.*



### Application

#### **Extended Classroom Activity:**

Have students look in the help wanted advertisements in the newspaper to see what types of jobs are in demand in their community.

#### **FFA Activity:**

Have students interview a current FFA member who has an SAE program to identify the factors that influenced that member to select the SAE program s/he currently has.






#### **SAE Activity:**

Have the student interview a current agriculturalist to identify possible ways to prepare for that occupation.

**Evaluation:**

SAE.5.Assess

**Answers to Assessment:**

1.  Bad choice, there are labor laws that prevent her from working in a butcher shop at this age, and the choice has little to do with her future career plans.
2.  Good choice. Brad has the academic ability, time and support to do this project. It fits in with his career goal.
3.  Good choice. Sarah has the needed transportation, is old enough to meet any legal concerns, and this does match up with her career goals.
4.  Bad choice. Tom does not have the ability needed to complete this project. There is no indication he has the equipment to complete the project and would probably be overwhelmed when it came time to do the project.
5.  Good Choice. This SAE is in line with Hector's career goals, and he has access to the equipment and transportation he needs.

## Match the Vehicle to the Person

		
JAGUAR XK8	JEEP LIBERTY	GMC VAN
		
GMC SIERRA	CADILLAC DEVILLE	TOYOTA COROLLA

**Matt** is a traveling salesperson. He sells flashlights to hardware stores. He drives about 700 miles a week. He wants a comfortable vehicle that gets good gas mileage. He needs some space to carry his flashlight samples. He also uses this vehicle as a family car. He has a wife and a five year old son. Matt makes a comfortable living but is not rich.

**Sally** owns a landscaping business. She often needs to transport shrubs, top soil, bags of fertilizers, tools and supplies in her vehicle. Sometimes there will be 2-3 workers riding with her. There are times when she has to pull a trailer. This vehicle will be used primarily for Sally's business.

**Todd** is a college student studying forestry at North Carolina State University. He uses his vehicle for dates, driving to a bike shop where he has a part-time job and for driving 120 miles to his home twice a month. One of the reasons he chose to go to North Carolina State is because it is two hours to the ocean and three hours to the mountains. About once a month he goes to the ocean where he drives on the beach and does surf fishing. Then about once a month he goes to the mountains where he hikes and rides his trail bike. He typically has 2-3 friends who go with him. Todd is not rich but his parents do help support him, and he doesn't have to worry too much about money.

Which vehicle is best for each person?

Matt \_\_\_\_\_

Sally \_\_\_\_\_

Todd \_\_\_\_\_

## Role Playing

**Student A:** Hi! I am 16 years old and think I would like to be a horse trainer when I grow up. I don't know a thing about horses and have never been around them. But I just love horses. My room at home is full of horse pictures. This is the first agriculture class I have taken. What are some possible SAEs that I could do?

**Student B:** I hope you can help me decide on an SAE program. I live in an apartment in the city with my Grandmother. She has lots of plants around the apartment and I help her water and care for the plants. I sort of like working with the plants. I am 15 years old and money is pretty tight where I live. Since I don't have much money, I don't know if I can afford to have an SAE. What do you think?

**Student C:** Hello! I would like to have an SAE but just don't now if I can. See I don't live on a farm. Since I don't live on a farm, I don't think it is possible to have an SAE. And anyway, I am afraid of animals. They are so big and can bite. I do plan to go to college and have to take all these college prep courses. I am in advanced biology right now. We have been studying fish, and I think it is cool they way the breathe and everything. I am 15 years old. So I guess I can't have an SAE, right? This is probably the only year I will be in agriculture class.



**Student D:** I am here to see you about having an SAE. I don't plan on going to college and need to get a job to help the family out. I am 17 and have my own car. It is sort of a junker. I got it real cheap because it wasn't running, but I figured out what was wrong and got it going. I really like to tinker with engines. I have rebuilt two lawn mowers in the past year in my home shop. My neighbors were going to throw them away but all they needed was a little work. What do you think I should do for my SAE?



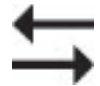



**Student E:** Got a few minutes? I need some advice about my SAE program. I don't know what to do. I live on a five acre farm where we raise some chickens and have a big vegetable garden. I like agriculture but sure can't make a living on 5 acres. I am thinking about going to college to study Animal Science. I think I want to be an Animal Scientist in the future. I play football, basketball and baseball on the school varsity and just don't have a lot of time.



## Selecting the Right Supervised Agricultural Experience (SAE)



### Matching:

Five students will be described, along with what they plan to do for their SAE. After thinking about the various factors that should be considered in selecting an SAE, determine whether or not the student's choice is good or not. Circle the thumbs down symbol  if the choice is not a good choice. Circle the thumbs up symbol  if the choice is a good choice. Then in the column on the right, tell why the choice was good or bad. The choice is worth two points and the reason is worth two points for a total of 20 points.

 	<p>Maria is a 14-year-old freshman. She plans to go to college and study agricultural economics when she graduates from high school. She would like to work with the USDA in their economic development section when she graduates. She plans to work in a local grocery store as a butcher for her SAE.</p>	<p>Why is this choice good or bad?</p>
 	<p>Brad is 16 years old and drives a small economy car to school. He is an A-B student and his only extracurricular activity is Boy Scouts. He would like to go to college and study biochemistry. His career goal is to work as an agricultural biochemist for an agricultural chemical company. Brad wants to work with some of his classmates to take water samples from local streams and rivers to see if they are contaminated with industrial or farm chemicals. His chemistry teacher says Brad can use the equipment in the chemistry lab.</p>	<p>Why is this choice good or bad?</p>
 	<p>Sarah doesn't plan to go to college. She would like to start an animal grooming and pet sitting business after high school. She is 17 years old and lives on the city bus line. She has been offered a job with a local vet caring for small animals after school. She would exercise the animals and bathe and groom them.</p>	<p>Why is this choice good or bad?</p>





	<p>Tom is a C-D student. His favorite school subjects are agricultural mechanics and art class. His least favorite subject is biology. He is 15 years old and really doesn't know what he plans to do after high school. His older brother won the state science fair when he was in high school, so Tom wants to do an Agriscience Research project to be like his brother. He is thinking about trying to get some lighting bugs, isolating the gene that causes the lighting bugs to blink, and then transferring that gene to pumpkins to produce blinking pumpkins. He thinks these would be a great novelty at Halloween.</p>	<p>Why is this choice good or bad?</p>
	<p>Hector would like to own a lawn care business someday. He is 16 and has access to a small pickup truck that his father owns. His father is also willing to let Hector use the family's lawn mower and blower. Hector plans to print up some posters in the school computer lab advertising his availability to mow lawns in the neighborhood.</p>	<p>Why is this choice good or bad?</p>